



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,805	12/27/2001	Hiroyuki Kurata	2342-131P	1377

2292 7590 10/06/2004

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

MCCLENDON, SANZA L

ART UNIT PAPER NUMBER

1711

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,805

Applicant(s)

KURATA ET AL.

Examiner

Sanza L. McClendon

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on June 17, 2004 has been entered.

Allowable Subject Matter

2. Prosecution on the merits of this application is reopened on claims 1-20 are considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al (JP 63-248807) in view of Yagi et al (JP 03-163182) and Yutaka et al (JP 04-028772).

Art Unit: 1711

Note: information is taken from the abstracts of each cited documents. A translation has been sent for, wherein once made available a copy will be provided to applicant.

Yamamoto et al teaches photosetting compositions usable as adhesive or sealant for optical instruments. The composition of Yamamoto et al comprises (A) a monomer having fluoroalkyl groups and (meth) acrylate groups and can be represented by the structural formula found in the abstract and those found in table 1 (pages 4-5), (B) a fluorine-containing polymer, such as a polymer composed of mainly fluoroalkyl (meth) acrylate, (C) a crosslinking acrylate monomer, and (D) a photoinitiator. Wherein said formula and compounds of table 1 anticipates at least one of the fluorine containing monomers of instant claims 1, 4-5, 12-14. Yamamoto et al does not expressly teach using fluorine-containing monomers having the general formula (2).

Yutaka et al teaches UV curable difunctional fluorine containing acrylic monomers in combination with fluorine-containing polymers are well known in the adhesive art. Said di-functional fluorinated (meth) acrylate monomers can be found on page 5 both columns. Yamamoto et al and Yutaka et al are analogous art because they are from the same field of endeavor that is the art of fluorine-containing UV curable adhesives. Therefore one of ordinary skill in the art at the time of the invention would have found it obvious to use the monomers as taught by Yutaka et al in the composition as taught by Yamamoto et al. The motivation would have been a reasonable expectation of obtaining an adhesive composition with adequate crosslinking to provide the desired adhesive strength upon curing in the absence of evidence and/or unexpected results. Therefore the combination of references renders claims 15-17 obvious.

Yamamoto et al does not expressly teach a copolymer comprising the structural units claimed by applicant. Yagi et al teaches adhesive compositions are prepared by dissolving an acrylic monomer-soluble fluorocarbon polymer in an acrylic monomer, polymerizing the solution, and optionally further converting the polymer into an interpenetrating network. Yagi et al teaches the fluorocarbon polymer can be copolymer or terpolymers comprising vinylidene fluoride, such as tetrafluoroethylene/tetrafluoropropylene/vinylidene fluoride terpolymer—see page 2, lines 10-15. In addition, Yagi et al teach the acrylic monomers such as methyl methacrylate and

Art Unit: 1711

fluorinated acrylic monomers. The examiner deems that Yagi et al shows that adhesives comprising fluorinated polymers and fluorinated monomers are well known in the art.

Yamamoto et al and Yagi et al are analogous art because they are from the same field of endeavor that is the art of fluorinated acrylic adhesive compositions.

Therefore it would have been obvious for an artisan of ordinary skill in the art at the time of the invention to use the vinylidene copolymers of Yagi et al in the adhesive composition as taught by Yamamoto et al. The motivation would have been a reasonable expectation of obtaining an adhesive composition having adequate heat resistance, good transparency, and good adhesivity as taught by both Yamamoto et al and Yagi et al in the absence of unexpected results and/or convincing arguments to the contrary.

Yamamoto et al and Yagi et al do not expressly teach using said adhesive for the production of a pellicle. However, it is well-known in the art of pellicle films to adhere a pellicle films to pellicle frames using fluorinated adhesive composition as disclosed in the description of the Related Art section. Therefore it would have been obvious for an artisan of ordinary proficiency to use the combined teachings of Yamamoto et al and Yagi et al to produce a pellicle. In addition to it being common knowledge in the pellicle art, Yamamoto et al teaches using said fluorinated adhesives as sealant and adhesives for optical instruments, wherein the pellicles would be included the broad disclosure of optical instruments.

The combination of references is deemed to render the invention of claims 1-8 and 12-17 obvious. Claims 18-20 are rejected because they do not further limit claims 1, 4, or 5. Claims 1, 4, and 5 are deemed to be unpatentable over the combination of reference because the combination teaches at least one or two of the fluorine containing monomers found in the instant claims. The combination of references does not expressly teach the ratio of polymer to monomer as found in instant claims 9-11; however since applicant has failed to establish the criticality of said ratio's, the examiner believes the adhesive would have worked equally as well with any ratio in the absence of evidence to the contrary. In addition, the examiner deems that it would have been within the skill level of a ordinarily skilled artisan to calculate the instantly claimed ratio. The motivation would have been a reasonable expectation of obtaining satisfactory bond strengths between the pellicle frame

Art Unit: 1711

and pellicle film after cure in the absence of evidence to the contrary and/or unexpected results.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sanza L McClendon

Examiner

Art Unit 1711

9/29/01

SMc